

Final Report on Variability Studies of Narrow Line Seyfert 1 Galaxy

Dr. Herman Marshall

August 3, 1994

P.O. # : S-73173-Z

Principal Investigator: Dr. Herman Marshall, Eureka Scientific

We have completed reductions of the ROSAT light curve of 1H0419-577 and the paper on this data will be published shortly. My portion of the work for this contract is completed: I supported the data reduction and analysis; I reviewed papers on the subject; and I presented results at a scientific conference.

We found that the source was not as variable as other soft AGN such as the narrow line Sy 1 galaxies (NLS1s). The NLS1s vary on time scales of days, while the ROSAT data for this target was fairly constant over a week at a time. Thus, it was very important to have a light curve that spanned 60 days as was the case for these ROSAT observations because the power spectral distribution can be established to very low frequencies that are rarely measured.